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SYSTEM AND METHOD FOR CONFIGURING AN ELECTRONICALLY STEERABLE BEAM OF A TRAFFIC SIGNAL LIGHT

CROSS REFERENCE TO RELATED APPLICATION

[001] The present application is a Continuation-In-Part of U.S. Patent Application No. 09/649,661 filed August 29, 2000, ^{U.S. Patent No. 6,614,358} entitled SOLID STATE LIGHT WITH CONTROLLED LIGHT OUTPUT, the teachings of which are incorporated by reference herein.

FIELD OF THE INVENTION

[002] The present invention is generally related to light sources, and more particularly to traffic signal lights including those incorporating both incandescent and solid state light sources, and to configuring an electronically steerable beam of a traffic signal light.

BACKGROUND OF THE INVENTION

[003] Traffic signal lights have been around for years and are used to efficiently control traffic through intersections. While traffic signals have been around for years, improvements continue to be made in the areas of traffic signal light control algorithms, traffic volume detection, and emergency vehicle detection.

[004] There continues to be a need to be able to predict when a traffic signal light source will fail. The safety issues of an unreliable traffic signal are obvious. The primary failure mechanism of an incandescent light source is an abrupt termination of the light output caused by filament breakage. The primary failure mechanism of a solid state light source is gradual decreasing of light output over time, and then ultimately, no light output.

[005] The current state of the art for solid state light sources is as direct replacements for incandescent light sources. The life time of traditional solid state light sources is far longer than incandescent light sources, currently having a useful operational life of 10 - 100 times that